

REMARKS

This submission is in response to the Office Action dated June 20, 2008 (the “Office Action”). Claims 1– 8 are pending in the application. Applicants have amended claim 8 without prejudice or disclaimer. No new matter has been added.

Claim Objections / Rejections

Claim 8 was objected to under 37 CFR 1.75(c) because it is in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. Claim 8 has been amended in a manner which is believed to overcome the objection.

Claim 21 was rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 has been amended in a manner which is believed to overcome the rejection.

Claim 23 was objected to under 37 CFR 1.75(c) because it is in improper form because a multiple dependent claim does not refer back in the alternative only. Claim 23 has been amended in a manner which is believed to overcome the objection.

Rejections under 35 U.S.C. §103(a)

A. Claims 1-3

Claims 1 – 3 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2003/0002420 to *Yoon et al.* in view of U.S. Patent No. 6,540,397 to *Yoshinari et al.* The Applicants respectfully traverse these rejections as follows.

None of the cited references, including *Yoon et al.* and *Yoshinari et al.*, individually or in combination, disclose or suggest the specific combination of claim 1. For example, *Yoon et al.* does not disclose or suggest “a multi-part recording area (54,57) interrupted by an intermediate zone that physically is constituted by a first intermediate part (55) located at the end of the first recording layer and a second intermediate part (56) located at the start of the second recording layer”, as recited in claim 1 (Emphasis Added).

The cited portions of *Yoon et al.* are directed towards a lead-out area or a middle area for performing a guard function. *Yoon et al.* discloses, “The present invention ... unifies the physical geometry of a first recording layer L0 of the dual layer disc (i.e., wobbles formed on at least one lateral surface of each groove provide a uniform transmittance of an optical light beam passing through a recording layer) as well as newly defines a **lead-out area or a middle area** to perform a guard function. **A middle area means** each outer circumference of the first and second recording layers in opposite tracks. That is, the opposite tracks are sequentially addressed from the inner circumference of the first recording layer L0 to the outer circumference thereof, and then from the outer circumference of the second recording layer L1 to the inner circumference thereof.” See *Yoon et al.* at par. 14.

It is respectfully submitted that neither the lead-out area or middle area of *Yoon et al.* teaches or suggests, “an intermediate zone that physically is constituted by a first intermediate part (55)

located at the end of the first recording layer and a second intermediate part (56) located at the start of the second recording layer", as recited in claim 1. Instead, the lead-out area of *Yoon et al* is constituted of a **single part**, characterized by a differentiating wobble for performing a guard function. *Yoon et al.* teaches, "The differing wobbles of the user data area 120 and the lead out area 130 unify the physical geometry of the optical recording medium as well as provide a discriminating lead-out area as a guard. The wobbles formed on at least one lateral surface of each groove according to the present invention provide a uniform transmittance of an optical light beam passing through a recording layer. For example, to unify the physical geometry of the disc and to serve as a guard, the lead-out area 130 may be configured such that the wobble 135 has a frequency of 2 times that of the user data area 120." * See *Yoon et al.* at par. 37. Hence, there is no teaching or suggestion in *Yoon et al.* that, "an intermediate zone that physically is constituted by a first intermediate part (55) located at the end of the first recording layer and a second intermediate part (56) located at the start of the second recording layer", as recited in claim 1. Thus, *Yoon et al.* does not disclose or suggest the specific combination of claim 1. The Office does not cite portions of *Yoshinari et al.* for disclosing this element of claim 1.

Additionally, *Yoon et al.* does not disclose or suggest "a lead-in part of the pregroove located at a part of the first recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and the ending part comprising said wobble modulation representing second control information including recording parameters for the second recording layer", as recited in claim 1 (Emphasis Added).

In the Office Action the Examiner cites *Yoon et al.* at par. 34 for allegedly teaching wobble modulation representing **first control information**. *Yoon et al.* discloses at par. 34, "an optical recording medium including a lead-in area 100, a user data area 120 and a lead-out area 130, each area having grooves 123 and lands 125 formed thereon. Wobbles 105 and 135 are formed on at least one lateral surface of each of grooves 123 and lands 125 in the user data area 120 and the lead-out area 130."

In the Office Action the Examiner also cites *Yoon et al.* at par. 24 for allegedly teaching wobble modulation representing **second control information**. *Yoon et al.* discloses at par. 24, "Further, in case of multi-layer recording media, the two or more recording layers have different recording patterns in their lead-out areas."

Applicants disagree for at least the following reasons. *Yoon et al.* is directed to preventing an optical pickup that performs recording/reproduction from deviating from the user data area. See *Yoon et al.* at par. 44. As such, *Yoon et al.* teaches that **different types of wobbles** are formed on the grooves of the user data area or the lead-out area, thereby preventing an optical pickup that performs recording/reproduction from deviating from the user data area. *Yoon et al.* also teaches at par. 44 that in an optical recording medium predetermined recording patterns and/or **different synchronization patterns** can be recorded on the lead-out area and the user data area alone or in addition to the different type wobbles to provide a guard function preventing deviation of the pickup from the user data area. The recording and synchronization patterns in addition to the wobbles can allow **double discrimination** of the lead-out area. Thus, an optical pickup can be prevented from deviating from the user data area 120 by discriminating between

the user data area 120 and the lead-out area 130. In a multi-layer optical recording medium having two or more recording layers, Yoon et al. teaches that the recording medium includes a user data area 120 and a lead-out area 130, each having grooves 123 and lands 125. Wobbles 105 and 135 are formed on at least one lateral surface of each of the grooves 123 and the lands 125. The wobbles 105 and 135 may include addressing information or reference time information, e.g., phase locked loop (PLL). To prevent an optical pickup from deviating from the user data area 120, the wobbles 105 and 135 formed in the user data area 120 and the lead-out area 130, respectively, may be modulated into different types of wobbles.

It is respectfully submitted that there is a difference between forming wobbles having different modulations in the user data area and lead-out area, respectively, to prevent an optical pickup from deviating from the user data area, as taught in *Yoon et al.* and "a lead-in part of the pregroove located at a part of the first recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and the ending part comprising said wobble modulation representing second control information including recording parameters for the second recording layer", as recited in claim 1.

According to the invention, and as recited in claim 1, control information **specific to each layer** is encoded in the pregroove wobble in the ending part of **that respective layer** thus forming **first control information for the first recording layer** and **second control information for the second recording layer**. It is respectfully submitted that

encoding layer specific control information is different from forming wobbles having different types, as taught in *Yoon et al.* Thus, *Yoon et al.* does not disclose or suggest the specific combination of claim 1. The Office does not cite portions of Yoshinari et al. for disclosing this element of claim 1.

Applicants respectfully submit that a *prima facie* case of obviousness does not exist based on the combination of *Yoon et al.* and *Yoshinari et al.* since all of the elements of claim 1 are not found in the combination of references.

Claims 2-3 depend from claim 1, which Applicants have shown to be allowable. Thus, claims 2-3 are allowable, at least by virtue of their dependency from claim 1.

Further, the dependent claims recite additional features that are not disclosed by the cited portions of *Yoon et al.* and *Yoshinari et al.*. For example, the cited portions of *Yoon et al.* and *Yoshinari et al.* do not disclose the lead-in part (68) of the pregroove is extending on the first recording layer from a starting radial position (66) to an ending radial position (67), and the ending part (69) of the pregroove that comprises the second control information is substantially located between a radial position corresponding to said ending radial position (67) and a radial position corresponding to said starting radial position (66), as recited in claim 2. Instead, *Yoon et al.* merely discloses that in a dual-layer optical recording medium having a first recording layer L0 and a second recording layer L1 of opposite track paths, the lead-out area 30 allows an optical pickup to keep

performing tracking during interlayer jumping from the outermost circumference of the first layer L0 to the outermost circumference of the second layer L1 without deviating from the track paths. The opposite tracks are sequentially addressed from the inner circumference of the first recording layer L0 to the outer circumference thereof, and then from the outer circumference of the second recording layer L1 to the inner circumference thereof. For this additional reason, claim 2 is allowable.

B. Claims 4-8

Claims 4 – 8 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yoon et al. et al. in view of Yoshinari et al. as applied to claim 1 above and further in view of U.S. Patent No. 6,404,713 to Ueki. The Applicants respectfully traverse these rejections as follows.

As explained above, the cited portions of *Yoon et al.* and *Yoshinari et al.* do not disclose each of the elements of claim 1. For example, the cited portions of Yoon et al. do not teach “a lead-in part of the pregroove located at a part of the first recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and the ending part comprising said wobble modulation representing second control information including recording parameters for the second recording layer”, as in claim 1. The cited portions of *Ueki* also do not disclose the elements of claim 1 that are not disclosed by the cited portions of cited portions of *Yoon et al.* and *Yoshinari et al.* For example, the cited portions of Ueki do not disclose or suggest “a lead-in part of the pregroove located at a part of the first

recording layer intended for recording the lead-in information comprising said wobble modulation representing first control information including recording parameters for the first recording layer, and the ending part comprising said wobble modulation representing second control information including recording parameters for the second recording layer", as in claim 1. Instead, Ukei discloses a device for scanning a track on a record carrier via a beam of radiation, the device comprising a head for providing the beam, recording means for writing marks in the track via the beam, a front-end for generating a scanning signal for detecting mark in the track, and wobble detection means for retrieving the first control information from the wobble modulation on the first recording layer and for locating the ending part and retrieving the second control information from the wobble modulation on the second recording layer. Therefore, the cited portions of *Yoon et al*, *Yoshinari et al.* and *Ukei* , individually or in combination, do not disclose each and every element of claim 4 or claims 5-8 by virtue of their dependence from claim 4. Hence, claims 4-8 are allowable.

CONCLUSION

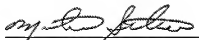
Applicants have pointed out specific features of the claims not disclosed, suggested, or rendered obvious by the cited portions of the cited references as applied in the Office Action. Accordingly, Applicants respectfully request reconsideration and withdrawal of each of the objections and rejections, as well as an indication of the allowability of each of the pending claims.

Any changes to the claims in this response, which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-8 are believed to be in condition for allowance and patentably distinguishable over the art of record.

The Examiner is invited to contact Mr. Michael Belk, Philips Intellectual Counsel, Philips Electronics North America, at 914-945-6000 if such a call would facilitate allowance of this application.

Respectfully submitted,



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